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THE AUSTRALIAN TELEGRAPH SYSTEM.

BY HUGH H. LUSK.

THE people of Australia own their own telegraph system, and it is managed as a part of the postal system of the country. This arose in the beginning from the fact that, when telegraphs were first constructed, no private company would have taken the risk of making telegraphic communication pay a dividend on the capital required to construct and work the lines. As in the case of the railroads, the choice lay between telegraphs constructed and managed by the Government, and no telegraphs at all; and the people of Australia adopted a system of Government ownership. Each of the five colonies into which the great island-continent was divided began the construction of telegraph lines, and pushed them forward as fast as the spread of population appeared likely to make any return on the outlay. Australia has always been a wealthy country, and especially so since the gold discoveries of half a century ago, and it has always had a tendency to be lavish rather than niggardly in all matters of public expenditure. This tendency has been illustrated in its telegraph system as much perhaps as anywhere. Lines were made, and afterwards extended, in districts where the demand seemed to be small, and where the population was certainly scanty, to an extent which would not have commended itself to the business instincts of a great corporation, and could not have been expected to yield a large return on the capital invested. The result has been that Australia, more than any other country in the world, presents a field for investigating the effects that may be expected to flow from the public ownership of a great public convenience like the telegraph system of to-day.

The whole question was brought into prominence by the debates that took place in the Federal Parliament, in con-

nection with the passage of the new Postal Act of the Commonwealth. In each of the colonies—now the States of the federation—the telegraph had always been treated as a part of the post-office system; and, therefore, when the Federal Constitution was framed, it was agreed, as a matter of course, that the lines should go to the Commonwealth instead of remaining the property of the States, like the railroads. The fact that the colonies had been wholly distinct had led to considerable differences both in administration and in charges, and the purpose of the new Postal Act was to establish uniform rates throughout the Commonwealth on a scale that should at once be liberal to the users and fair to the revenue. It was natural, therefore, that the whole question of cost, management and charges should be thoroughly ventilated in the debates on the measure before it became law.

The circumstances of Australia, and the conditions of its settlement, have had the effect of making both its railroads and its telegraphs unusually extensive in comparison with the numbers of its population, and this is markedly the case with its mileage of telegraph lines. At present, the great island is only settled on a strip of country bordering on the coast, and even that strip does not include the more northern shores either on the East or West, and takes in no part of the north side at all. The consequence is that a line of telegraph which connects the settlements of Queensland on the northeast of Australia with those of West Australia on the west coast—a distance, in a direct line, of about two thousand five hundred miles—covers fully double that distance from the necessity of keeping in touch with the settled districts. There is, indeed, one line of telegraph which of necessity ignores this rule, and passes for nearly its whole length of about seventeen hundred miles from the south to the northwestern corner of the island, through an unsettled country. The purpose of this line is to connect settled Australia with the rest of the world by way of Java and India, and it passes through great districts of the interior, which were first explored for the purpose of its construction. Under the circumstances, it was not possible that telegraph facilities could be supplied in Australia on a small scale, or at a trifling cost.

The telegraph lines now owned and operated by the Federal Government for the people of Australia, have a length of fully 48,000 miles, while the length of the wires is considerably more than a hundred thousand miles. Thus, it will be seen, the people of Australia and their Government have a considerable experience of the cost both of constructing and operating a telegraph system. The mileage of their lines is actually greater than that of any European country with the exception of Russia, Germany and France; while, in proportion to the number of the inhabitants, it is probably nearly six times as great as that of any other country in the world, with the single exception of its near neighbor, New Zealand. There are upwards of three thousand telegraph stations kept open for the convenience of a population which does not exceed four millions; and the revenue derived from messages is shown to be sufficient to defray the cost of operating and maintaining the lines, as well as defraying the interest charges on the cost of construction at the annual rate of three per cent.

Under the circumstances, it would be natural to suppose that the charges for telegraphic service in Australia must be very high, and it is here that the debates in the Commonwealth Parliament, and the schedule of rates finally appended to the Act, throw an unexpected light on the question. It appears that in no part of Australia has the cost of telegraphy ever been high, and the rates now adopted as those which will secure the revenue from loss under the three heads of operating, maintaining, and paying interest on the money invested, are remarkably moderate when compared with those in force in most parts of the world, and not least in America. The rates finally settled were these: For town and suburban messages—suburban meaning practically a radius of ten miles beyond the city limits—the rate fixed is twelve cents for a message not exceeding sixteen words, which includes the address and signature. For messages to any point within the same State from which they are sent, the charge is fixed at eighteen cents for the same number of words. For messages to any other State within the Commonwealth, the charge for a message of similar length is twenty-four cents. In all cases, the charge for extra words beyond the sixteen is a uniform rate of two cents a word. Delivery is made within a radius of one mile from the receiving office, and for this there is no extra charge.

It will be seen at once that these charges are remarkable for

their moderation, in comparison with any experience the people of America have yet had; they are, in fact, lower for the service rendered, and the distances traversed, than the rates established in any other country except New Zealand, but they are fully justified by the experience of the three principal States of the Commonwealth-New South Wales, Victoria and Queenslandthe tariffs of which have practically been adopted. When it is remembered that Australia, as a whole, is a country of the same area as the United States, and that the distances actually traversed are very much greater than those between any points of telegraph communication in America, it will be seen that the charge of twenty-four cents for a sixteen-word message is very much less than one-half, and would probably work out at about one-third, the amount charged in America. The great area of the five States occupying the mainland-three of the five being each more than two and a-half times as large as Texas, and a fourth four-fifths of its size-renders the State rate of eighteen cents for similar messages equally cheap compared with American rates: while the city and suburban tariff of twelve cents has no parallel in American experience.

The question which naturally arises at once is: How is it done? We have here a population of four millions of white men, scattered along a coastal belt of country some five thousand miles in length, with widely separated centres of population, enjoying the most modern facilities of communication to an extent far greater in proportion to their numbers, and at less than half the cost at which the same facilities are supplied to a population nearly twenty times as great and far less widely scattered. At the first glance there seems to be no reasonable way of accounting for the difference. To the advocates of public ownership and management of the great necessaries of modern civilized life, it would seem that the problem is by no means so serious. In the course of the debate in the Australian Federal Parliament, the Postmaster-General of the Commonwealth stated boldly that not only was the Australian telegraph system as efficient as any in the world, and, with the single exception of that of New Zealand, by far the cheapest, but that it was so owing to its public ownership, and to the economies naturally attending the system. A very brief examination of the facts will show that this claim is at any rate very largely founded on facts.

The three branches of expenditure dealt with by the Australian Minister for Postal Services were, the interest on the cost of constructing the lines, the cost of maintaining the lines in good order when constructed, and the working expenses of the service -including, of course, salaries of officials and workmen of all grades, office expenses and rentals, and the supply of electricity. Every telegraph system must provide for all these in some form or other, but a Government system, if honestly worked in the public interests, as the postal system is in this and other civilized countries, has great advantages in the direction of economy in two out of the three branches of expenditure. In the first place, the credit of a whole people is always better than the credit of any part of it, and therefore loans required by nations with a stable government, and a reasonable character for honesty, can always be obtained on the most favorable terms. Australia is a young though a wealthy community, and as a rule the value of money is somewhat higher there than in older countries; but the \$18,-000,000 of borrowed money spent by its various Colonial Governments on the construction of telegraph lines costs to-day, in interest, only a small fraction beyond three per cent. It need hardly be pointed out that such a return as this would not meet the views of any great mercantile corporation. It may fairly be said that the expenses coming under the second head of telegraph expenditure -that is to say, the actual cost of producing the necessary supply of electricity—would be quite as little in private hands as it could be made in the hands of a Government department. This, of course, is true; but there is no reason why it should be any less, except the foolish and shameful one that intelligence and honesty are not to be obtained for the service of the public. It is in the third class of the expenditure requisite for conducting a telegraph system, however,—the department of salaries and office expenses—where, it is claimed, the advantage of public ownership becomes an element of startling magnitude.

In Australia, the telegraph and telephone services are both incorporated with the Post-Office, and as such they require few, if any, separate offices. There are fully three thousand telegraph stations in the country for the convenience of the public, and nearly every one of these is also the district post-office. There are in the United States about 27,000 telegraph stations, but there are not less than 77,000 post-offices for the use of the people:

that is to say, there is a post-office for every thousand, but a telegraph station for every three thousand. In the newer, poorer, and far less thickly settled country of Australia, there are fully six thousand post-offices to meet the requirement of four millions of people—or one to every 666 people; and more than three thousand of these are also telegraph stations—being one to about 1,300 persons. The contrast is suggestive, but it is most suggestive of all in its financial aspect. If every second post-office in this country were also a telegraph station, the public would be nearly as well supplied with the means of rapid communication as the settlers in Australia now are, instead of one third as well, and they would also be saved a great deal of money. America it would then be, as it now is in the Commonwealth of the South Pacific-each telegraph station would be at the natural centre of population, where it would require no separate offices, and no separate staff of clerks and operators, except in cities of considerable size. Every country postmaster or clerk would in that case be required also to be a competent telegraph operator, and thus an endless duplication both of offices and officials would be avoided.

It is in this way that the Australian Postmaster-General accounts for the cheapness of his telegraph system when compared with the cost in other and older countries—but this is not all. The cost of production is low, and the machinery for carrying on the service is economical, indeed, but these things alone would not enable him to make both ends meet. The secret of its success is not only that it is economically conducted; not only that it is not loaded with heavy interest and big dividends; but, more than either, because it is appreciated and made use of by the people to an extent unknown where charges are higher, and conveniences are less. Of European nations Great Britain makes most use of the telegraph, but her population is concentrated within a small area and, therefore, is easily reached: her people use the telegraph to the extent of rather more than two messages a year for every inhabitant of the country. In the United States the population is more scattered and therefore more difficult to reach; three years ago the American people sent as nearly as possible one message over the telegraph wires for each inhabitant. In Australia population is more widely scattered than in America, and vastly more so than in England; yet three years ago two and a half messages for every inhabitant of the country passed over the telegraph wires of the Government. There is, it appears from the statement of the Australian Postmaster-General, only one country in the world that has supplied greater telegraphic facilities for its people, and has charged even lower rates than those of Australia, and that is the neighboring country of New Zealand. There, he admits, the Government supplies a post-office for every five hundred people, and a telegraph station for every eight hundred, and there too the rates are somewhat lower than even in Australia: he also adds, and the addition is a significant one, that there the people three years ago sent four telegrams for each inhabitant, and the revenue from the telegraphs was even more satisfactory than in Australia.

The lesson taught by the experience of Australia, and enforced by the official head of its postal department, is by no means a new one. It is, after all, neither more nor less than the stock argument in favor of the system of Trusts, which are advocated as a practical necessity in these days of competition, because, owing to the greatness of the scale on which they operate, they can save immensely on the cost of working, and therefore can, presumably, afford to give the public a better article at a lower price. This is exactly what, the Australian Postmaster-General asserts (and apparently beyond the reach of contradiction), the system of Government telegraphy does for the people of Australia. Only by the operation of this great public Trust, managed for the people by the people, would it be possible in a new country, of wide extent and thinly populated, to supply the facilities for speedy and reliable communication, except at a cost so enormous as to be prohibitory. Only by giving the public the facilities which such a public Trust alone can give, can they be induced to use the convenience on a scale so large as to make it pay. Such would seem to be the experience of Australia, and to even a greater extent of New Zealand.

Hugh H. Lusk.